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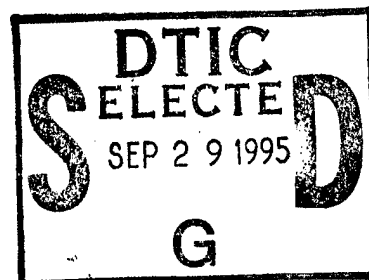
TITLE: The Impact of the Health-Care Perceptions of Female Patients and Their Health-Care Providers on Women's Health Aboard Ships Compared to Women at Shore Stations

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REPORT DATE: 22 AUG 95

TYPE OF REPORT: Annual



PREPARED FOR: U.S. Army Medical Research and Materiel Command  
Fort DETrick, Maryland 21702-5012

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DTIC QUALITY INSPECTED 5

<b>REPORT DOCUMENTATION PAGE</b>			<b>Form Approved</b> <b>OMB No. 0704-0188</b>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
<b>1. AGENCY USE ONLY (Leave blank)</b>		<b>2. REPORT DATE</b> 22 AUG 95		<b>3. REPORT TYPE AND DATE COVERED</b> Annual 15 NOV 94 - 01 AUG 95
<b>4. TITLE AND SUBTITLE</b> The Impact of the Health-Care Perceptions of Female Patients and Their Health-Care Providers on Women's Health Aboard Ships Compared to Women at Shore Stations			<b>5. FUNDING NUMBERS</b>  95MM5526	
<b>6. AUTHOR(S)</b> Lex L. Merrill, Ralph G. Burr, Kristee Emens-Hesslink				
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b>  Naval Health Research Center  San Diego, CA 92186-5122			<b>8. PERFORMING ORGANIZATION</b>	
<b>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>  U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012			<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>	
<b>11. SUPPLEMENTARY NOTES</b>				
<b>12a. DISTRIBUTION/AVAILABILITY STATEMENT</b>  Approved for public release; distribution is unlimited.			<b>12b. DISTRIBUTION CODE</b>	
<b>13. ABSTRACT (Maximum 200 words)</b>  This is the first of a planned series of reports that will examine the health-care perceptions of naval personnel and their health-care providers. To date, about 60% of the data to be collected from female personnel attached to shore stations has been gathered. A preliminary, descriptive analysis was completed on this data set of 292 female enlisted and officer personnel. The results indicate that the majority of the personnel were satisfied with the health care they received at Navy sick calls. More specifically, the majority (about 80%) of the personnel who had been to sick call for obstetric/gynecologic health care appear to be satisfied with the promptness and professional competence of health-care providers and their with level of comfort when communicating with providers. However, a substantial percentage (approximately 20%) of the personnel were not satisfied with the overall obstetric/gynecologic health care they received at sick call.  Future reports will determine the extent of group differences (between patients stationed aboard ships and at shore stations), describe their needs for care, predict the use of mental and general health-care services, assess their psychological health, evaluate their anxiety levels, and determine whether significant perceptual differences exist between patients and health-care providers.				
<b>14. SUBJECT TERMS</b> Women's health; health-care delivery; patient-physician relationships; women's perceptions; distress; pain; consultations.			<b>15. NUMBER OF PAGES</b> 32	
			<b>16. PRICE CODE</b>	
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> Unlimited	

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Lex L. Merrill 22 AUG 95  
Lex L. Merrill, PI Date

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### Introduction

In addition to the unusual stressors military women are exposed to, that may compromise their health, numerous studies have found that women, in general, suffer from a higher incidence and prevalence of physical illness than do men.<sup>1</sup> Similar results have been found for Navy women serving aboard ships.<sup>2</sup> The consequences of women's higher morbidity is expressed in a larger number of disability days, health care facility visits, and prescription and over-the-counter drug use.<sup>1,3-6</sup>

Verbrugge<sup>5</sup> attributed women's poorer health profiles to their multiple roles, stress, and health attitudes. She outlined five mutually exclusive factors that have been used to explain sex differences in health: (1) biological risks: different genes and hormones; (2) acquired risks: different social activities, work environments, leisure activities, health habits, and psychological stressors; (3) psychosocial aspects of symptoms and care: different perceptions of symptoms, symptom seriousness, and abilities to initiate positive action; (4) health reporting behavior: different manner of speaking to others about their symptoms; (5) history of health care and care givers: how medical decisions decided upon by individuals affect the course of diseases and the beginning of new diseases. Factor 1 is not practically amenable to change. However, the other factors are related to patients' and caregivers' perceptions and behaviors and may be susceptible to positive change.

Numerous studies have documented a relationship between women's perception of the health care they receive and their physical well-being.<sup>7</sup> Women's perception of their health is also an important factor contributing to the use of health-care services, regardless of their actual physical health.<sup>8</sup> Connelly et al.<sup>9</sup> found that 21% of patients have health perceptions

lower than expected for their levels of physical health. These low health perceptions are correlated with increased emotional distress and higher utilization of health care resources. Women may use health care facilities at a higher rate because they more accurately perceive and rate their symptoms and respond by seeking appropriate health care. However, a consequence of this gender difference in ability to perceive and report symptoms may lead to underestimates of gender differences in morbidity.<sup>10</sup>

Feelings of distress detrimentally affect women's health. Sorensen and Verbrugge<sup>11</sup> defined distress as negative feelings that are the result of subjective responses to environmental conditions. Mechanic,<sup>12</sup> in a review of studies that investigated the effect of psychological distress on illness behavior, found that gender and level of distress were the most powerful predictors of help-seeking at medical care facilities. Distress not only contributes to bodily symptoms but also affects the way people perceive their physical health status and their use of medical care.<sup>11,12</sup> Repetti<sup>13</sup> found that subjective well-being and the behavioral adjustments that accompany short-term increases in job stressors are positively related. She stated that feelings of psychological and physical well-being (distress) are negatively affected by increases in job stress. Distress has also been found to be negatively correlated with patients' adherence to treatment.<sup>14</sup> In summary, these studies suggest that women in unusual occupations and work environments, such as women serving aboard ships, are subject to stressors that result in heightened feelings of distress. These feelings of distress may result in an increase in psychological and physical symptoms of illness.

Navy health-care facilities may be minimally staffed by a single hospital corpsman or by a combination of corpsmen, physician's assistants, etc. These medical care providers are

mostly men and have varying degrees of training, education, and experience.<sup>15</sup> Ample evidence suggests that these staffing factors cause female patients to be distressed when engaged in consultations with their health-care providers. For example, Hardin and Hailey,<sup>16</sup> in a study of health-care professionals' perceptions of female patient's psychological distress, stated that health-care professionals often do not accurately gauge women's need for care and therefore should be trained to recognize psychological distress and to appropriately refer seriously ill women.

Many studies support the contention that health care providers' perceptions of women have a detrimental effect on their care. For example, Lack<sup>17</sup> examined the medical records of women and men and found a significant number of sexist perceptions written in the records of women. Sexist attitudes and perceptions also were found in the treatment of women. For example, she found that women were given more prescriptions for minor tranquilizers, antidepressants, and analgesics. Her results also indicate that women are treated differently at health care facilities, and their complaints of pain may not be initially taken as seriously as those of men. The result of these perceptions is that women wait longer for referral for treatment and for effective medication. Cayleff<sup>18</sup> has stated that health care providers perceive women to be physiologically and emotionally vulnerable and unpredictable and this often leads to a gender-specific medical management approach. Similarly, Reid, Ewan, and Lowry<sup>19</sup> found that female patients with repetitive strain injury (RSI) who complained of pain frequently encountered skepticism from the medical community, which engendered feelings of fear and hostility in the patients and inhibited their rehabilitation.

More specifically, women's perceptions of treatment, responsiveness to treatment, and level of physical distress have been shown to be affected by male physicians' styles (egalitarian vs. paternalistic).<sup>20</sup> Lebaron et al.<sup>20</sup> concluded a direct relationship exists between a physician's style and psychological and medical outcome. Kaplan, Greenfield, and Ware<sup>21</sup> found that physician-patient relationships are a critical element that affect patients' health outcomes. They stated patient-physician interactions during consultations that contained more control by the patient, more negative affect expressed by both physician and patient, effective information seeking by the patient, and more patient conversation relative to that of the physician resulted in increases in physiologically measured health outcomes. In a related study, DiMatteo et al.<sup>14</sup> found that physician attributes, practice characteristics, and practice style have an affect on adherence to treatment regimens. Interestingly, DiMatteo et al.<sup>14</sup> found that physicians' level of job satisfaction was also positively correlated with patients' adherence to treatment regimens. Further research is needed to determine the factors that influence these role perceptions and to define the type of patients, illnesses, and settings in which the benefits of active role perceptions are most likely to be realized.

Brody et al.,<sup>22</sup> in a study of patients' perceptions of the treatment they desired as opposed to the treatment they received, discovered that patients were more satisfied with treatment that involved education, stress reduction, or negotiation (discussing ideas about how to manage the patient's medical problem) as compared to patients who had not received one of these interventions. Technical interventions, such as examinations, tests, medications, and nondrug therapy, were not related to patient satisfaction. In summary, Brody et al.<sup>22</sup> concluded that: (a) patients' perceptions about their involvement in health care was related to their attitudes



about their illnesses as well as to their recovery, and (b) their perceptions about nontechnical interventions were better predictors of their satisfaction than were their perceptions about technical intervention.

Other reports have shown that patients rate themselves more ill than do their physicians but less ill after a visit.<sup>23</sup> Martin et al.<sup>23</sup> also determined that patients' perceptions of a consultation differed from those of their physicians. Patients perceived that the physician emphasized prescribing, reassuring, and referring to a consultant whereas the physicians perceived they had emphasized listening, supporting, and giving advice.

Finally, an issue central to the deployment of women on Navy ships is the perception of the pregnant woman's role or position in shipboard organizations. Nice and Hilton<sup>15</sup> have estimated that 5 - 10% of the females serving aboard ships are pregnant. Although a 20-week transfer policy exists for women who become pregnant while stationed aboard ships, Navy policy also states that pregnant women may go to sea while pregnant. No study of pregnant women aboard Navy ships has been done. However, in a study of pregnant female soldiers' perceptions of the support they were given while pregnant, the soldiers believed the support given often increased their level of distress. They perceived the support they were given separated and often isolated them from their peer group. They were assigned different duty and given unwanted special privileges. This raised their level of distress in general as evidenced by increased feelings of fear and hostility. Although 79% of their supervisors felt they were highly supportive of pregnant soldiers, only 30% of the pregnant soldiers felt they were. The supervisors apparently overprotected the pregnant soldiers by assigning them to a

different section or giving them minimal duties. Pregnant soldiers felt socially separated from their peer group and underused during their pregnancies.

To render appropriate and effective care it is important that women's complaints are evaluated in an objective manner. Therefore, the current practices aboard ships will be investigated to determine if female patients would profit by providing health-care providers with education and training in objectively evaluating women's complaints and needs. Female patients' health could also be improved by providing patients and health care providers with education programs that improve the efficacy of consultations.

The primary goal of this study is to determine the impact of the health care perceptions of women on their health. The overall goal will be accomplished by describing women's perceptions of their health, health care facilities, interactions with health care providers (physicians, physician's assistants, and independent duty corpsmen), and distress levels during visits to health care facilities. Women's subjective perceptions will be combined with their medical histories to create recommendations for enhanced health care delivery.

A secondary goal was to address a request for data by the Secretary of the Navy concerning obstetric and gynecologic care.<sup>24</sup> This instruction requested information to determine if (1) the health care needs of pregnant, active-duty women were being met; (2) active-duty women were being given priority in receiving routine obstetric/gynecologic care; and (3) active-duty women have access to appropriately staffed and equipped military OB/GYN medical support.

This report presents a brief descriptive and preliminary analysis of a portion of the data collected for the study titled, "The Impact of the Health-Care Perceptions of Female Patients

and Their Health-Care Providers on Women's Health Aboard Ships Compared to Women at Shore Stations" (see Lex L. Merrill, Unpublished Research Proposal, 1994). Data in this report were collected from patients assigned to shore stations. To date we have completed about 60% of the planned data collection. Future reports will fully analyze group data (e.g., patients stationed aboard ships and at shore stations) to determine the extent of group differences, describe their needs for care, predict the use of mental and general health care services, assess their psychological health, evaluate their anxiety levels, and determine whether significant perceptual differences exist between patients and health care providers.

### Method

#### Participants

Data are presently being collected from randomly selected U.S. Navy, active-duty officer and enlisted personnel stationed aboard ships and at shore stations. Upon the completion of data collection, data will have been collected from about 500 personnel stationed aboard ships, 500 personnel attached to shore stations, and 100 health care providers attached to ships. All participants voluntarily complete the study measures and are working at shore stations.

Demographic and Background Data. To date, data have been collected from 292 female personnel (269 enlisted and 22 officers) who voluntarily completed the survey. The mean age is 25 years (range = 18 to 45+ years). About 44.5% of the sample indicated they were not married, 41.4% were married, 12.3% were divorced, and 1.7% other. The ethnic/racial composition of the sample is as follows: 61% Caucasian, 23.6% African-American, 7.2% Hispanic, 3.8% Asian, and 8.2% "other." The participants are well educated, 6.8% completed

graduate school, 8.9% completed a 4-year college, 9.2% completed a 2-year college, 33.2% had some college, 39.4% were high school graduates, 1.7% had a GED, and less than 1% had not completed high school. Concerning paygrade, 46.6% of the sample was E-1 to E-3, 39.4% was E-4 to E-6, 6.2% was E-7 to E-9, 5.5% was O-1 to O-3, and 2.1% was O-4 to O-5. Overall, the sample indicated they had been in the military from less than 3 months to more than 20 years with a mean of 5.0 years ( $SD = 5.0$ ). The enlisted personnel were asked what their overall performance mark was on their last evaluation and 57.3% indicated a 4.0, 30.4% indicated a 3.8, 10.1% indicated a 3.6, 1.8% indicated a 3.4 and 1 participant indicated a 3.0. Sixty-five of the enlisted participants did not indicate what their overall performance mark had been for their last reporting period.

### Test Instruments

The reliability and validity of the instruments used to collect the data have been evaluated and found to be acceptable (for a summary of the psychometric properties of the test instruments see Wilkin, Hallam, & Doggett, 1992). Alpha reliability estimates will be computed for all instruments at the completion of data collection. The following is a brief description of the instruments used to collect data from female participants:

Demographic and Medical History Questionnaire. This questionnaire was developed at the Naval Health Research Center (NHRC) and contains items related to the respondent's age, marital status, race, education, rank, years of military service, duty station, sick call visits, and performance evaluations. The number of sick-call visits and prescriptions will be used as measures of treatment outcome. Performance evaluation ratings will be used as indicators of how well subjects function on the job. This instrument contains 22 items.

Health Perceptions Questionnaire (HPQ; Ware, 1976). The HPQ yields data related to subjective reports of physical health. The HPQ contains 29 items and can be completed in less than 10 minutes. It was developed for use in evaluations of medical care, explaining health and illness behavior, studies of the relationships among health constructs, and population assessments of general health status.

Mental Health Inventory (MHI; Ware et al., 1979). The MHI is used as a general gauge of mental health or psychological functioning. The MHI contains 38 items and requires about 10 minutes to complete. It is used to identify unmet needs for care, predict the use of mental and general health care services, and assess the psychological health of populations.

Medical Interview Satisfaction Scale (MISS; Wolf & Stiles, 1981). The MISS was developed to measure the degree of satisfaction with a particular provider or consultation. The MISS contains 29 items and takes less than 10 minutes to complete. It is used to gain information concerning the content and technique of consultations.

Client Satisfaction Questionnaire (CSQ; Nguyen, Attkisson, & Stegner, 1983). The CSQ was developed as a measure of general satisfaction that could be used in various medical settings. The CSQ is used to gain patient evaluations of medical services. The CSQ contains 18 items and can be completed in less than 10 minutes.

Obstetric and Gynecologic Questionnaire. Seven items were taken from two previously mentioned instruments to address a request for data by the Secretary of the Navy (SECNAVINST 1000.10, 1995) concerning obstetric and gynecologic care. Two modified items were taken from the MISS to determine the respondents' level of comfort while communicating with obstetric/gynecologic health care providers. Five modified items were

taken from the CSQ to ascertain the respondents' opinion of the obstetric/gynecologic health care providers' punctuality, satisfaction with privacy during an appointment, appropriateness of the services they received, the competence and knowledge of the provider, and their overall opinion of the obstetric/gynecologic health care program. Two additional items were developed in-house to determine if the respondents had gone to sick call for obstetric or gynecologic care and who they had seen at sick call during those visits.

The following is a brief description of the instruments used to collect data from male and female health care providers:

Demographic and Medical Care Questionnaire. This questionnaire was developed at NHRC and contains items related to the respondent's age, marital status, race, education, rank, years of military service, duty station, and performance evaluations. Additionally, data are being collected concerning: (1) the number of patients they see at sick call and the number of prescriptions written, which will be used as a measure of treatment outcome, and (2) performance evaluation ratings, which will be used as indicators of how well respondents function on the job. This instrument contains 19 items.

Health Perceptions Questionnaire (HPQ; Ware, 1976). The first three items of the HPQ were used to gain health care providers ratings of their patients' health (as a group).

Medical Interview Satisfaction Scale (MISS; Wolf & Stiles, 1981). The MISS was reworded to allow for the measurement of the health care providers' opinions of their consultations with their patients. It is used to gain information concerning health care providers' opinions of the content and technique of their consultations. This instrument contains 29 items.

### Procedure

The survey instruments used in the present study are being administered to randomly selected participants aboard ships and to participants at randomly selected shore stations. The survey is being administered aboard ships as part of a more extensive survey package titled "U.S. Navy Shipboard Health Survey." The survey is being administered to personnel at shore stations as a unitary survey and is titled, "Health Care Survey."

Data collection began in May of 1995. A trained team of proctors is administering the patient survey to groups composed of randomly selected individuals aboard ships. The provider version of the survey is being administered by the same team of proctors on the same ships. The patient survey was also mailed to randomly chosen shore commands, and the commands were asked to distribute the survey to their personnel. The mailed version of the patient survey was accompanied by a protocol to be used by the command's proctor.

Personnel who agree to participate are given a Privacy Act statement and an informed consent, which includes a detailed description of the study and the procedures used to ensure confidentiality. Participants are told that they may "leave blank any section or question that (you) do not want to answer" and that they are "free to stop at any time before completing the survey."

### Results

This report presents a preliminary analysis of the data collected for the study titled, "The Impact of the Health-Care Perceptions of Female Patients and Their Health-Care Providers on Women's Health Aboard Ships Compared to Women at Shore Stations." Data collection has not been completed at this time. This report contains percentage rates and mean scale and

subscale scores for 292 female U.S. Navy personnel assigned to shore stations, which is about 60% of the planned data collection. No weighing was used in the computing of the percentage rates or the scale or subscale scores. Future reports will directly address the goals and hypotheses of the study detailed in Merrill (1994).

Sick Call Visit Data. About 90.1% of the sample stated they usually go to Navy sick call for health care, 4.1% said they usually see a civilian doctor, and 5.8% indicated they usually made other arrangements. Seventy-two percent of the sample said they had been to sick call for medical care in the past 3 months and the mean number of visits and prescriptions received was 2.0. Participants were asked who was the primary person that treated them at sick call and 47.1% indicated a doctor, 28.8% indicated a corpsman, 20.5% indicated a physician's assistant, and 3.6% indicated "other." About 49.5% of the respondents said they would prefer to be seen by a female doctor, 14.1% said a male doctor, 6.7% said a doctor of either gender, 6.0% said a female corpsman, 2.1% said a male corpsman, 18.7% said they did not have any preference, and 2.8% said "other."

Client Satisfaction. The CSQ was used to determine participants' general satisfaction with their treatment at sick call. The CSQ was also used to gain participants' evaluations of medical services at sick call. Possible scores on this 18 item instrument range from 18 to 78 points, with higher scores indicating greater satisfaction. The range of scores in the current study was 24 to 72 with a mean of 51.7 (SD = 9.2).

Psychological Functioning. The MHI was used as a general gauge of mental health or psychological functioning. It was used to identify unmet needs for care, predict the use of mental and general health care services, and assess the psychological health of participants.



The MHI was not intended to measure clinically defined mental illness. For the purposes of this report the means and standard deviations for two (anxiety and depression) of the five MHI subscales were computed. The possible range of scores for the anxiety subscale is from 13 to 78, with higher scores indicating more anxiety. Participants' scores on the anxiety subscale ranged from 13 to 73 with a mean of 36.1 (SD = 13.3). The possible range of scores for the depression subscale is from 19 to 114, with higher scores indicating greater depression. Respondents scores on the depression subscale ranged from 30 to 95 with a mean of 56.6 (SD = 15.1).

Health Perceptions. The HPQ was used to collect participants' subjective opinions of their physical health. It was used to evaluate medical care, explain health and illness behaviors, and to assess the general health of the respondents. Table 1 shows the means, standard deviations, and ranges for the six subscales of the HPQ.

Table 1. Means, Standard Deviations, and Ranges for the Health Perceptions Questionnaire Subscales\*

<u>Subscale</u>	<u>X</u>	<u>SD</u>	<u>Range 1</u>	<u>Range 2</u>
Current Health	32.0	7.8	9 - 45	12 - 45
Prior Health	11.2	2.9	3 - 15	3 - 15
Health Outlook	14.8	2.8	4 - 20	4 - 20
Resistance to Illness	14.3	3.4	4 - 20	4 - 20
Health Worry/Concern	15.3	2.6	4 - 25	6 - 23
Sickness Orientation	7.3	1.8	2 - 10	2 - 10

\* Range 1 = the possible range while Range 2 = the respondents' range

In addition to the subscales, the HPQ contains a General Health Rating Index. This index is a composite of 22 items with a scoring range from 15 to 40, with higher scores indicate better health. The participants mean score for the General Health Rating Index was 33.3 (SD = 5.5) with a range from 15 to 40. Finally, the one HPQ item related to pain may be scored separately. The item asked respondents, "During the past 3 months, how much pain have you had?" About 11.1% indicated "A great deal of pain," 31.4% indicated "Some pain," 38.7% indicated "A little pain," and 18.8% indicated "No pain."

Medical Interview Satisfaction. The MISS was used to measure respondents' degree of satisfaction with consultations at sick call. It was also used to gain participants' perceptions of the contents and techniques used in their consultations with health care providers at sick call. Table 2 presents the means, standard deviations, and ranges for the four MISS subscales and total score. Higher scores indicate greater satisfaction.

Table 2. Means, Standard Deviations, and Ranges for the Medical Interview Satisfaction Scale Subscales\*

<u>Subscale</u>	<u>X</u>	<u>SD</u>	<u>Range 1</u>	<u>Range 2</u>
Distress Relief	52.5	16.1	11 - 77	11 - 77
Communication Comfort	20.7	5.2	4 - 28	5 - 28
Rapport	47.6	14.1	10 - 70	10 - 70
Compliance Intent	20.8	4.9	4 - 28	8 - 28
Total Scale Score	142.0	36.4	29 - 203	45 - 203

\* Range 1 = the possible range while Range 2 = the respondents' range.

Obstetric and Gynecologic Care

About 66% (215) of the respondents stated they had gone to sick call for a scheduled gynecologic appointment, and 34% (111) said they had gone to sick call for a scheduled obstetric appointment. Table 3 shows the percentage of respondents who had seen each type of provider at a scheduled sick call appointment for gynecologic or obstetric care.

Table 3. Percentage of Female Patients by Type and Gender of Obstetric/Gynecologic Health Care Provider

<u>Type of Care</u>	<u>Type of Provider</u>	<u>%</u>
Obstetric	Female doctor	77.48
	Male doctor	54.95
	Female corpsman	15.31
	Male corpsman	6.30
	Other	9.01
Gynecologic	Female doctor	66.51
	Male doctor	54.42
	Female corpsman	13.02
	Male corpsman	5.58
	Other	10.23

To provide a preliminary overview of the data collected to this point, frequency rates were computed for each of the seven obstetric and gynecologic items and are presented in Table 4. As mentioned previously in the Method section, Items One and Two were taken from the MISS while Items Three through Seven were taken from the CSQ. Items One and Two, in

Table 4, had a Likert response scale that ranged from 1 (Very strongly agree) to 7 (Very strongly disagree) and asked respondents to indicate their level of embarrassment or inhibition when receiving obstetric or gynecologic care. Items Three through Seven, in Table 4, asked respondents to indicate their perception of their providers' promptness and competence along a 4-point Likert scale with various extreme options (Yes, very promptly/No, it seemed to take forever; Quite dissatisfied/Very satisfied; Highly appropriate/Highly inappropriate; Poor abilities at best/Highly competent and knowledgeable; and Almost all of my needs have been met/None of my needs have been met). Therefore, Items One and Two are concerned with the level of comfort the respondent felt while communicating with the obstetric or gynecologic health care provider. Items Three through Six were asked to determine the respondents opinion of the privacy and the appropriateness and competence of the care they received during obstetric and gynecologic appointments. Item Seven was used to gain the respondents' overall opinion of the obstetric/gynecologic health care program. Response options were available on a 4-point Likert scale for Items Three through Seven, therefore, a neutral response was not possible.

Items One through Seven were summed to determine the respondents' overall satisfaction with obstetric/gynecologic health care. The possible scoring range for both the obstetric and gynecologic items was 8 to 34, with higher scores indicating greater satisfaction. The mean score for the obstetric items was 20.5 (SD = 8.4), and the range was from 14 to 33. The mean score for the gynecologic items was 23.2 (SD = 4.8), and the range was from 13 to 34.

Table 4. Female Patients Perceptions of Obstetric and Gynecologic Care\*

<u>Item</u>	<u>Type of Care</u>	<u>% Agree</u>	<u>% Disagree</u>	<u>% Neutral</u>
1. While receiving OB/GYN care, I felt embarrassed while talking with the doctor (or corpsman).	OB	17.4	73.4	9.2
GYN	21.9	70.0	8.1	
2. While receiving OB/GYN care, I felt free to talk with the doctor (or corpsman) about private matters.	OB	65.1	20.2	14.7
GYN	63.0	24.5	12.5	
3. While receiving OB/GYN care, were you seen as promptly as you felt necessary?	OB	52.6	47.4	
GYN	60.0	40.0		
<hr/>				
		<u>% Satisfied</u>	<u>% Dissatisfied</u>	
4. While receiving OB/GYN care, how satisfied were you with the privacy you had at the facility?	OB	77.9	22.1	
	GYN	75.5	24.5	
5. Considering your particular needs, how appropriate are the OB/GYN services you have received?	OB	75.2	24.8	
	GYN	81.0	19.0	
6. While receiving OB/GYN care, how competent and knowledgeable was the doctor (or corpsman)?	OB	81.4	18.6	
	GYN	81.9	18.1	
7. While receiving OB/GYN care, to what extent has the Navy's health care program met your needs?	OB	80.5	19.5	
	GYN	81.9	18.1	

\* OB = obstetric, GYN = gynecologic

### Discussion

This is the first report of a planned series of reports that will examine the health care perceptions of naval personnel and their health care providers. A preliminary, descriptive analysis of approximately 60% of the available data for personnel attached to shore stations has been completed. Scale and subscale means and standard deviations were computed for 292 female enlisted and officer personnel attached to shore stations. The results show that the majority of the respondents are satisfied with the health care they received at Navy sick calls. More specifically, the majority (about 80%) of the personnel who had been to sick call for obstetric/gynecologic care appear to be satisfied with the promptness and professional competence of health care providers, and their level of comfort when communicating with providers. However, a substantial percentage (approximately 20%) of the respondents were not satisfied with the overall care they received. Although these analyses comprise about 60% of the planned data collection for shore activities, the generalizability of the results are not known and therefore should be interpreted with caution.

More than 90% of the respondents indicated they used Navy sick call for health care, and 72% said they had sought care at a sick call in the past 3 months. A definite plurality (49.5%) of the respondents stated they would prefer to be seen by a female physician, and overall 55.5% indicated they would like to be seen by a female health-care provider. About 16.2% of the participants indicated they prefer to be seen by a male health-care provider, while 28.2% did not have a preference or indicated "other." Other studies have found that the gender of the health-care provider may have a detrimental effect on the health care of women.<sup>14,17-19,21</sup> Future analyses will determine whether the gender of the health-care provider

affected the respondents' perception of their health care. Generally, the present subsample of participants appeared to be satisfied with their medical care as evidenced by their mean CSQ score and, more specifically, with their consultations at sick call as measured by their mean MISS subscale scores.

The mean HPQ General Health Rating Index indicated that the participants perceived their health to be good. The mean index score was 33.3, which is at the high end of the possible range of scores. However, 42.5% of the respondents said they had "A great deal of pain" or "some pain," while 57.5% indicated they had "A little pain" or "No pain." These reports of pain appear to contradict the results of the MHI, which indicate the subsample has low anxiety and low levels of depression, and of their HPQ General Health Rating Index mean score. This apparent inconsistency in reports may be resolved by detailed analyses of the entire sample.

### Conclusions

Although the present preliminary results should be viewed with caution, they indicate that the majority of U.S. Navy female personnel sampled are satisfied with the health care they receive at shore-based sick calls. Scale and subscale score data have been presented that describe women's perceptions of their health, health-care facilities, interactions with health care providers (physicians, physician's assistants, and independent duty corpsmen), and distress levels during visits to health-care facilities.

A secondary goal was to address a request for data by the Secretary of the Navy concerning obstetric and gynecologic care.<sup>24</sup> The preliminary results of the present study show that the majority of active-duty women located at shore stations perceive their

obstetrical and gynecologic health care needs are being met; the same group of women also believe they are being seen promptly for obstetric and gynecologic care. Finally, most active-duty, shored-based women in this sample indicated they have access to appropriately staffed and equipped obstetrical and gynecologic care and facilities. However, a substantial minority of the participants are not satisfied with the obstetric and gynecologic care they have received.

Sick calls are usually the first point of contact for active-duty personnel who enter the Navy health care system. Therefore, it seems reasonable to conclude that patients' perceptions of their providers and the health care they receive at sick call form the basis for their future interactions with providers and possibly for their own health. The present study addresses these concerns by collecting data related to the health-care perceptions of patients who have been treated at sick call.

Future reports will determine the extent of group differences (between patients stationed aboard ships and at shore stations), describe their needs for care, predict the use of mental and general health-care services, assess their psychological health, evaluate their anxiety levels, and determine whether significant perceptual differences exist between patients and health care providers. These reports also will compare and contrast the percentage rates found in the present study with those found in other studies. However, the primary issue to be addressed by the present study in future reports is the impact of the health-care perceptions of women on women's health.



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